

Insert the attached 110 sheets of figures in place of the originally filed figures.

**REMARKS**

Reconsideration is requested.

Attached is a copy of the Notice dated February 12, 2002.

The specification has been amended to include a revised copy of the drawings in response to the attached Notice. No new matter has been added. The specification has been further amended on page 3 to indicate the renumbering of the drawings. A marked up copy of the amended page 3 is also attached indicating the changes that have been made. No new matter has been added.

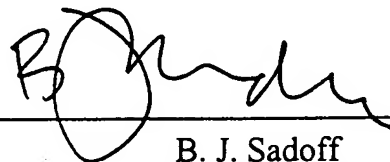
The above and attached are believed to be completely responsive to the Notice dated February 12, 2002, however the Office is requested to contact the undersigned if anything further is required in this regard.

An early and favorable Action on the merits is requested.

Respectfully submitted,

**NIXON & VANDERHYTE P.C.**

By: \_\_\_\_\_



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Gene 17.5 belongs to the gene superfamily coding for lectins and gene 12.3 to the gene family coding for proteins that bind guanine (guanine nucleotide-binding protein). This gene is described in Immunogenetics 39:22 1-229, 1994.

Gene 12.3 is described in P.N.A.S. USA, vol. 86, 4594-4598, June 1989, Genetics.

The class I B-FIV gene is described in Immunogenetics 31:405-409, 1990.

The invention relates, in particular, to molecules of nucleic acids corresponding to those of the sequences of one of the following genes:

sequence of the Rfp-Y system

B-FV (figure 1); B-F VI (figure 2);

sequence of the B system,

genomic 8.4 (figures 3a and 3b); B-F I (figures 4a and 4b); C121 (figures 5a to 5q); DM (figure 6); TAP1 (of the beginning of exon 2 at the 3' end) (figures 7a to 7e); and TAP2G (figures 8a to 8f), and other genes comprised in figures 10a to 10d, 11a to 11d, 12, 13, 14, 15, 16, 17, 18, 19a to 19c, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32a to 32o, 33, 34a to 34n, 35, 36, 37, 38, 39, 40, 41, 42, 43a to 43c, 44, and 45a to 45b .

By studying the nucleic acid sequences of the molecules defined above, it was possible to identify accurately the blocks of polymorphisms which must be detected in order to establish a reliable and accurate genotyping.

By comparing the sequences of these blocks originating from different genes of the same haplotype or from the same gene of different haplotypes, the inventors took into consideration divergent sequences, and developed for each gene complementary oligonucleotides of these divergent sequences.

Specific primers which are discriminating with respect to a given gene of the B or Rfp-Y system are obtained in this way.